

## TECHNOLOGY RELATED INFRASTRUCTURE IN LIS DEPARTMENTS

**Dr. Chaure Anjali**

Uma Mahavidyalaya,  
Pandharpur

**Mr. Kulkarni Rahul**

Shri Shivaji Mahavidyalaya,  
Pandharpur

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**Abstract :** *Now a days it is very easy to install a any APP in our mobile system. And for that we get very enormous benefits from the technology. In Higher Education we see the technology can gave its useful hands to mankind. It is our duty to tackle this technology and gave maximum service to our users. No doubt our next generation is very known to mobile technology besides that there are very high technical machines are in market to gave a better service. As concerned with library we are having OPAC technology with the help of that user can get their book in just few seconds. Like that RFID, 3M Security system, QR code and other electronic systems are their. In this paper we discuss how the technology is used in our departments.*

**Keywords :** *Quality of Teaching, Digital Age, E-Resources, OPAC, QR codes*

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### **Introduction :**

In India there is now a new mantra information and communication technologies (ICTs). In a burst of 'technology as solution' enthusiasm not seen since the green revolution, ICTs are expected to solve a variety of problems, ranging from assuring India's place in the sun to limitations of ICTs in poverty alleviation. Poverty alleviation is not a matter of service delivery, but one of enhancement of agency of the poor, based on the transformation of class, caste, ethnic and gender relations within which the poor exist. establishing good governance and alleviating poverty.

Indian higher education system is world's third largest education system (NIRF 2015; Sharma and Sharma 2015). It is witnessing interesting, positive and purposeful changes. In the last few years India has become more advanced economically, technologically, medically, socially and with this change, the aspirations of its young people are also changing. The young and intelligent youth of India have become more discerning and demanding. Moreover, the demographic constitution of India is inclining towards the youth. With the median age of the Indian population at 27.9 years and half of the Indian population (53.7%) being below 25 years of age (Census India 2011). It can rightly be said that 'the oldest nation on earth is about to become the youngest country of the world'.

### **Quality of Teaching and Learning :**

The Quality is a much compounding problem to look at various aspects of higher education . yet arguably there is acute shortage of faculty, rigid outdated curricula, absence of employer engagement, and low scope for interdisciplinary learning. Students still have low

transversal skills, suffer from the lack of critical thinking, analytical reasoning, collaborative working etc. Ineffective quality assurance system, lack of early stage research experience and no check on accountability from the government, students and other stakeholders are few other reasons to affect the quality standards. There is need that the students have to be equipped with the right skills to bridge the cavernous gap between academia and industry.

All the citizens from all In an ideal state it ought to be the utmost concern and responsibility of the government to impart education of best quality to its citizens to make them not only citizens but also noble human walks of life should have an easy access to education from elementary level to the highest level, irrespective of their differences of caste, creed or economic status that too only in state aided educational institutions.

Although, Higher education in India is undergoing a transformation. The reason for transformation is mainly due to the expansion of higher education in India and the new demands on the system. Last decade has witnessed a rapid expansion in terms of number of courses offered, infrastructure, ambience, staff, teaching, support services, it is very difficult to come to common platform of understanding with diversified types of institutions. The quality of the institution depends on the quality of the students It produces and its staff. Good governance of the institutions helps them to attract more research projects, good students, parental support, and social image. Good governance is required to perform better in the competitive environment. Every institution as well as company strives to perform better to compete in the global cutthroat aggressive atmosphere.

Information “Superhighways”, electronic libraries and high technology manufacturing are central to the Clinton administration’s vision of restoring economic competitiveness.

Nevertheless, the online platform has been the backbone of education thought-out the pandemic and has preserved the academic rapport amongst students, teachers, parents, administrators, and other stakeholders. On one hand one has to admire the adoption and adaption of online technology and on another hand, the results are far from expected.

Developing countries like India have been prudent enough to skirt away from the erroneous models which were adopted in advanced countries like the USA earlier. India has leveraged the latest advancements such as the hybrid model where old as well as new are combined and juxtaposed for the maximum benefits of learners as well as universities.

#### **The major advantages of online learning are :**

01. In pandemic situations it is the only option to safeguard the continuity of education.
02. Much time can be saved. The time in transit and commuting can be saved to a greater extent. Besides, students have the chance to study in their own time and especially for free. Online learning is so effective because students can finish their tasks quickly, and there is more time left for hobbies or any other activity.
03. Online education is a boon, especially for those who are working.

#### **There are also some challenges to this online education boon especially :**

01. The success of this pattern of education depends much on self-motivation and the sincere urge for knowledge on the part of student.

02. Nothing can replace the human element in teaching-learning process. Not all faculty are comfortable with virtual teaching and not all students have a digital infrastructure that allows them to continue their education online. In the online mode of education a teacher has no way to find out whether students are attentive and whether they are able to understand the concepts clearly.
03. Although online presentation is highly attractive, it is generally theory-based and lacks practice-based or hands-on learning. Not undermining the importance of theories and fundamentals concepts, online sessions are a viable.
04. Education is a holistic process. Apart from the teaching-learning process, it's main focus is character building, value inculcation, and the emotional development of the pupil.
05. In a developing country like ours, it is a little farfetched to believe that each child has his/her own mobile device and each village has an active internet system.
06. Conducting online examinations is a challenging task. Questions papers generally consist of multiple choice questions and applied questions. The online pattern of examination fails to provide a comprehension and analytical assessment and evaluation tool to justify student's varied skills not do a fair and just evaluation of students. Assessment and accountability have been jeopardized as learners can funk or morph the exams.
07. Another disadvantages refers to the fact that online courses do not provide active platform where a learner can self-express and indulge with other classmates lively during sessions.

#### **DIGITAL AGE :**

- TODAY WE ARE IN DIGITAL AGE.
- MOST OF US USING E-GADGET VERY EASILY.
- E-GADGET ( MOBILE,COMPUTER,LAPTOP,TAB,)
- FOR E - READER – KINDLE IS VERY USEFUL OPTION FOR THEM.

#### **E-Resources :**

An electronic resource is defined as a resource which require computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed.

E-resources (electronic resource) is that, "Information (usually a file) which can be stored in the form Electrical signal usually, but not necessary on a computer

- **Types of e-resources :**

The e-resources are basically divided in two major types are :

1. **Online e-resources**, which may include :

- E-journal (Full text & bibliographic)
- E-books
- Online databases (53 databases are there from A to Z)
- Web sites

**2. Other electronic resources** may include :

- CD ROM
- Diskettes
- Other portable computer databases.

**Advantages :**

- Multi – Access;
- Speed;
- Functionality
- Content;
- Mobility;
- Saving Physical space;
- Convenience;
- Saving time and Money

**Types of E-Resources :**

- E-book;
- E-journal;
- E-newspaper;
- E-magazines;
- Indexing and Abstracting Databases;
- Full text databases;
- Reference database;
- Statistical databases;
- Image Collection;
- Multimedia Products;
- E-thesis;
- E-Clipping;
- E-Patents;

**Consortia :**

- UGC-INFONET CONSORTIUM
- INDEST
- N-LIST
- IIM'S LIBRARY CONSORTIA
- CSIR – E-JOURNAL CONSORTIUM
- FORSA

- HELINET
- DRDO
- DELCON AND DELCON+
- ERMED
- ICICI KNOWLEDGE PARK ( INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA)

There is widespread agreement that the nature of libraries and librarianship is rapidly being transformed by modern, electronic technologies. The most common projections of libraries of the future assume that the new technologies and services will be controlled and managed by individuals whom we can identify as librarian. Regrettably, we have failed to consider seriously an alternative, equally plausible scenario, one in which there may be competition between librarians and others for control and management of basic information resources and for the right to deliver information services.

### **Changed Environment :**

**Scenarios for the Electronic Library :** Much speculations and thought have been devoted to the emerging electronic library. As with any attempt to imagine the future, the scenarios we have constructed assume the continuity of present institutional and organizational structures. The most popular scenarios assume that the institutions we currently identify as libraries will increasingly acquire products of modern, electronic technologies and will employ a variety of electronic information services to satisfy the needs of their users. It is further assumed that these new technologies and services will be controlled and managed by individuals whom we can identify as librarians.

01. OPAC;
02. Digital Attendance System;
03. QR code facility;
04. 3M security systems;
05. RFID technology;
06. Two side open access book shelf

**OPAC :** The Online Public Access Catalog (OPAC), now frequently synonymous with library catalog, is an online database of materials held by a library or group of libraries. Online catalogs have largely replaced the analog card catalogs previously used in libraries.

Although a handful of experimental systems existed as early as the 1960's the first large scale online catalogs were developed at Ohio state university in 1975 and the Dallas public library in 1978. These and other early online catalog systems tended to closely reflect the card catalogs that they were intended to replace. Using a dedicated terminal or teller client, users could search and handful of pre-coordinates indexes and browse the resulting display in much the same way they had previously navigated the card catalog.

Next Generation Catalogs:- Newer generations of library catalog systems, typically called discovery systems are distinguished from earlier OPACs by their use of more sophisticated search technologies, including relevancy ranking and faceted search, as well as

featured aimed at greater user interaction and participation with the systems, including tagging and reviews. These new features rely heavily on existing metadata which may be poor or inconsistent, particularly for older records.

**Digital Attendance Software :** It is the newly added software for students and also to the faculty of the college. Actually it is the measurement of the library use by users. It is now a days widely used all over in library.

An online attendance platform is one of them, which is developed to automate the daily attendance in schools and colleges. Additionally it helps to maintain accurate records and generate summarized student attendance reports.

It has many advantages over conventional time tracking used at organization. Typically such organizations maintain a register book, where people enter their name, time-in, time-out and other required details but the problems with this manual systems is inaccuracy, time consuming, unreliable and most important is less secure.

**QR Code Facility :** In today generation we use that in every place there is free use of the new technology called QR code faculty. QR means quick Response. In our daily transaction. It is very easy technique. As it is used in money matter. It is also in the library field also. It is a type of barcode that can be read easily by a digital device and which stores information as a series of pixels in a square-shaped grid.

Quick response is a type of matrix barcode invented in 1994 by Japanese company Devso Wave. A barcode is a machine-readable optical label that can contain information about the item to which it is attached. In practice, QR codes often contain data for a locator, identifier, or tracker that points to a website or application. QR codes use four standardized encoding models to store data efficiently, extensions may also be used.

The quick response systems became popular outside the automotive industry to its fast readability and greater storage. Application include product tracking, item identification, time tracking, document management, and general marketing.

### **Conclusion :**

Although we are talking about the new technology. Whether there is reliability and very fast access to users there is no challenge to the super technology. Now a days we seen there is lot of changes in the scenario of today's world now changes because of the technology. So as far as the department of Library and information science is concerned there is no doubt benefits of the technology. So every library as it is in metro city or rural area technology gives a platform to the department.

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